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A NEW SPECIES OF PYCNOGONUM FROM CALIFORNIA.

BY J. E. IVES.

In a collection of Crustaceans and Echinoderms from San Diego, California, recently sent to me for determination by Mr. Frederick Stearns of Detroit, there is an apparently undescribed species of *Pycnogonum*. It is of especial interest owing to the fact that only a single species belonging to the group of the Pantopoda has been described from the Pacific Coast of North America.¹ Although only two species are thus now known from the West Coast it is probable that it will be found in the future that a number of species exist on these shores. Professor Edmund B. Wilson² has enumerated fifteen species from the New England waters, and it is possible that as many may be found upon the Pacific Coast.

Five specimens were sent by Mr. Stearns. As none of them possess ovigerous legs I presume they are all females.

The species has been named after the collector. To the liberality of the same gentleman I am indebted for the preparation for publication of the accompanying plate.

The species may be characterized as follows :

***Pycnogonum Stearnsi* n. sp.**

Body broad and flat. Lateral processes with scarcely any interval between them.

Proboscis sub-cylindrical, slightly swollen in its anterior half, but contracting somewhat at its extremity, about one-third the total length of the body.

Each cephalo-thoracic segment with a prominent tubercle dorsally in the median line on the posterior border and a somewhat smaller tubercle on the outer edge of each lateral process; first segment about two-thirds of the length of the proboscis, with a not very broad, slightly constricted neck; second, third and fourth segments respectively equal to about two-thirds of the length of the first; posterior borders of the segments slightly elevated.

Oculiferous tubercle bluntly conical; eyes black, small, nearly equally spaced; the posterior pair slightly further apart than the anterior pair.

¹*Ammonothea longicaudata* Stimpson, from Puget Sound, (Proc. Acad. Nat. Sci. Phila., 1864, p. 159.)

²Report U. S. Comm. of Fish and Fisheries, 1878 (1880.)

Abdomen clavate, truncated at its extremity, slightly swollen in the middle.

Legs stout; first or basal joint broad, rather broader antero-posteriorly than the lateral processes of the segments, with the appearance of a dorsal notch on its outer edge due to the close approximation of two dorsal tubercles; second joint rather smaller than the first; third rather smaller than the second; the three joints together in the third ambulatory leg about as long as the proboscis; fourth strongly developed, about two-thirds of the length of the proboscis proximal half of the ventral surface considerably swollen, and a single rather weakly developed dorsal tubercle at its distal extremity; fifth about equal in length to the fourth, but more slender; sixth rather shorter than the fifth; seventh very short, sub-triangular; eighth about as long as the sixth; ninth about two-fifths of the eighth. Fifth, sixth and eighth joints without tubercles; two or three bristles upon the distal dorsal surface of the sixth; a few fine hairs upon the ventral surface of the seventh, and a few bristles upon ventral surface of the eighth. No auxiliary claws.

Color in alcohol, yellowish-brown.

Length of body of the largest of the five specimens, from the extremity of the proboscis to the extremity of the abdomen, 6 mm.

Three of the type specimens have been given by Mr. Stearns to the museum of the Academy and two of them are in his own collection.

This species appears to be mostly nearly allied to *Pycnogonum littorale* Ström, differing from it among other characters, however, markedly in the shape of the proboscis, which in the latter species is conical, and in *Pycnogonum Stearnsi* sub-cylindrical.

A list of the species of *Pycnogonum* hitherto known is appended.¹

P. littorale Ström.

Coasts of the North Atlantic ocean and adjacent seas.²

¹In this list *Astridium* (*Pycnogonum*) *orientale* Dana, from Balabac Strait (U. S. Expl. Exped., vol. xiii, p. 1391, pl. 96, figs. 2 a, b, c,) has not been included, as it probably represents a distinct genus.

²Philippi's (Archiv. f. Naturg., 1843, ix Jahrg. p. 175) record of this species from Naples I consider to be exceedingly doubtful, as Professor Dohrn did not find it there. Philippi probably mistook one of the two species described from that place by Professor Dohrn for this species. I am also very skeptical in regard to the species described under this name from Chili by Nicolet (Gay's Historia fisica y politica de Chili, Zool., T. III, p. 308; Atlas, pl. IV, fig. 8). If a species of *Pycnogonum* is found on the coast of Chili it is almost absolutely certain that it is not *P. littorale*. If the figure given by Nicolet is correct, it must be a species distinct from *P. littorale*.

Var *tenue* Slater (Ann. Mag. Nat. Hist. vol. III, p. 283).

Japan.

P. australe Grube (Jahresb. der schles. Ges. f. vaterl. Cultur, 1869, p. 54.)

Australia.

P. nodulosum Dohrn (Fauna und Flora des Golfes von Neapel, III, pp. 203-207, Taf. XVI, Fig. 1-3, 1881).

Mediterranean (Naples).

P. pusillum Dohrn (Op. cit. pp. 207-210, Taf. XVI. Fig. 4-8).

Mediterranean (Naples.)

P. crassirostre Sars (Den Norske Nordhavs-Expedition, XX, pp. 12-14, 1891.)

Norwegian Coast, Iceland.

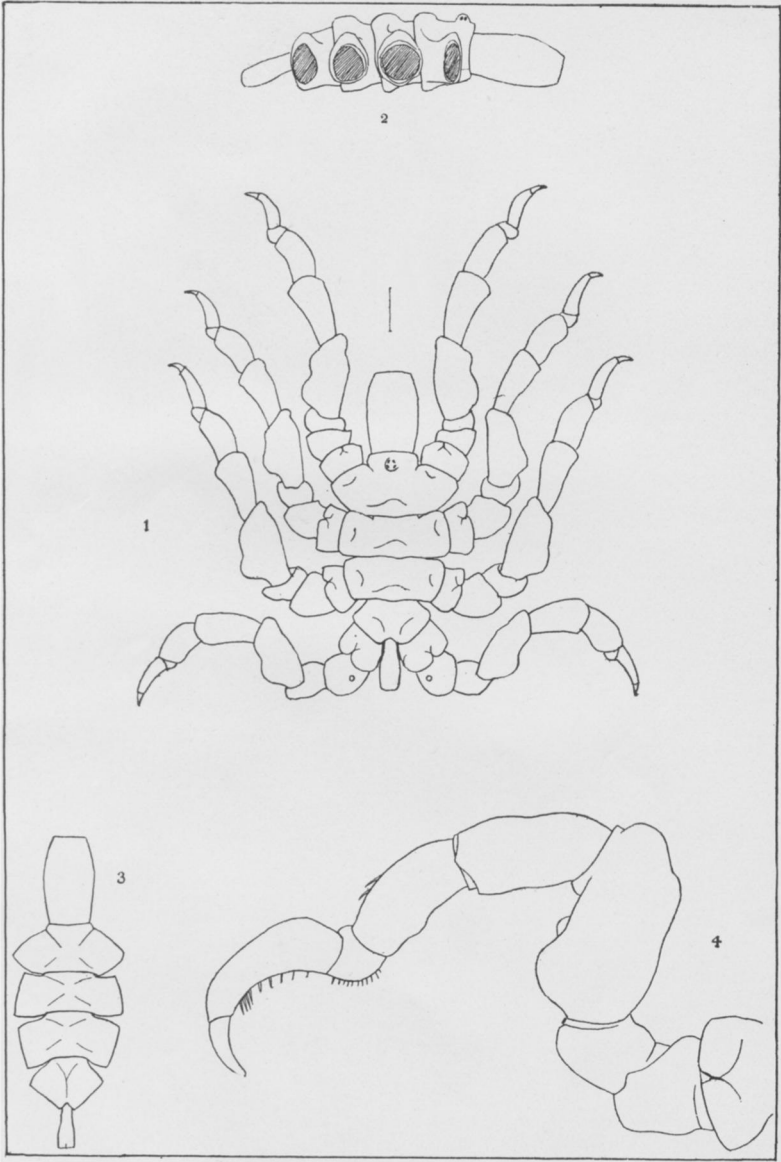
EXPLANATION OF PLATE X.

Fig. 1. *Pycnogonum Stearnsi*, n. sp., dorsal surface, much enlarged.

Fig. 2. Right side of the trunk.

Fig. 3. Ventral surface of the trunk.

Fig. 4. Postero-dorsal surface of the third ambulatory leg on the left side, much more enlarged.



Ives, del.

IVES, PYCNOGONUM STEARNSI.